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 SOAS FESTAS FELIZ NATAL BUON NATALE GOOD JUL
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 JOULUA FELICES FIESTAS FROHLICHE WEIHNACHTEN
 CHRISTMAS AND A HAPPY NEW YEAR SON NADEL
 LEG JOL GOTT OG FARSARELT KOMANDI AR

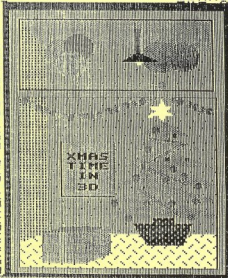
3D CONSTRUCTION KIT USER GROUP



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CONSTRUCTION KITS NEWSLETTER



ISSUE 16
 DEC 93/JAN 94

GELUKKIE KERSTFEEST NADOLIG LLAWEN JOYEUAU NOEL
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CONTENTS

EDITORIAL.....	PAGE 4
LETTERS.....	PAGE 5
DATA AND OBJECT COMPATIBILITY.....	PAGE 9
THE USER GROUP GAME.....	PAGE 10
HINTS AND TIPS.....	PAGE 13
NEWS.....	PAGE 14
GRAND CHRISTMAS COMPETITION.....	PAGE 14
PUBLIC DOMAIN LIBRARY.....	PAGE 16
8 BIT ROUTINES.....	PAGE 18
16/32 BIT ROUTINES.....	PAGE 21
TELEPHONE HELPLINES/HALL OF FAME.....	PAGE 26

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CORRESPONDENCE. All correspondence addressed to the User Group will be assumed to be for publication unless otherwise stated. If you want a personal reply to a letter then please enclose a S.A.E. or replies will be published in the pages of the newsletter space permitting.

CONTRIBUTIONS are always welcome from members. Hints, tips, routines or anything else that you think would be of interest to other members are most welcome. It is your club so we want to hear from you.

BACK ISSUES. If you have missed any issues they are all still available at a cost each of £2 (UK), £2,50 (Europe), £3 (R.O.W).

HELPLINES

POSTAL HELP: If you wish to write in for help then please feel free to do so but please don't forget to enclose a stamped, self-addressed envelope or International Reply Paid Coupon if writing from abroad.

TELEPHONE HELPLINE 0492 877305: If you need to telephone for help then I will try to be available during the hours between 2pm and 7pm each weekday. I will be delighted to hear from you. As this helpline is available only to members of the User Group, please have your Registration Number handy and give your name when you call.

Mandy Rodrigues

The 3D Construction Kit User Group

67 Lloyd Street, Llandudno, Gwynedd, LL30 2YP

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USEFUL 3D BITS AND BOBS OF INTEREST TO MEMBERS - AND FREE OF CHARGE

INDEX TO KIT2 MANUAL: Most useful when programming and trying to find that elusive FCL command. Also includes some commands not listed in the manual or addendum. Please enclose LARGE (A5 size) stamped S.A.E.

INDEX TO SUPPLIED CLIPART by JOHN HAYWARD. Standard S.A.E. please.

SOLUTION TO KITGAME. Please state 8 or 16 bit. Standard S.A.E.

THE CLUBGAME: All the routines listed to date so new members can join in programming our game. Please enclose LARGE (A5 size) stamped S.A.E.

TRANSLATING ROUTINES: List of differences between 8 and 16/32 bit FCL commands so members can utilise ALL routines. (Standard stamped S.A.E)

LIST OF USER GROUP PD TITLES: Latest PD list of Amiga, Atari ST and C64 items sent in by members (if not in current newsletter). Standard size Stamped S.A.E. please.

LIST OF 3D PC PD: Latest PD list for PC's For this item only please send S.A.E to Mark Rose, 39 Balfour Court, Station Rd, Harpenden, Herts, AL5 4XT. Please enclose large stamped S.A.E. or if writing from abroad please enclose two reply paid coupons. All other items please write to normal address above.

EDITORIAL

Welcome to issue 16 of the 3D Construction Kit User Group Newsletter.

Everything is great! Not a drop of water in sight! We are all back to normal and raring to go. The festive season is almost upon us, children are dropping hints on what they would "just adore to get" and I have started to deck the halls with Christmas holly - albeit the plastic variety. The tree is up - not to stay I hasten to add - it looks extremely precariously balanced to me and I've warned everyone that it is going to topple over. They don't believe me but I know, it wobbled last Friday. I wonder why it is that as soon as December arrives the kids start nagging to get all the Christmas decorations up and race round like mad things trying to decorate everything in sight? I even had to unload a load of tinsel and plastic angels from the computer monitor to be able to write this! Funny that nobody thought to hang a bunch of mistletoe over my chair though - wonder if they are trying to tell me something. We've got three weeks to go and things are already hectic. I've had to rescue the poor dog and untangle the tinsel from around his neck and the Christmas tree balls which have been tied to his tail twice already. At the moment he is lying under my chair quivering and trying to make himself as small as possible - not an easy feat with a dog that size. I've not checked the budgie or the hamster yet and am dreading what I might find. Strange thing is that as soon as January 6th arrives and it is time to un-decorate and pack away the family are nowhere in sight!

To help celebrate the festive season there is a Grand Christmas Competition to be found in this issue. Thanks to Domark for kindly donating some of the prizes. I hope that everyone will enter the competition and I wish everyone the very best of luck. Check out the centre pages for what to do and how to enter.

I've some up to date news about the progress on version V2.09 of Kit 2 which you'll find on page 16 and there is some excellent news in this issue about how the work on conversion of datafiles between different computers is progressing. Tony Hartley set me yet another poser this issue - he asked me to name all Father Christmas' reindeer. Ok Tony, this time I'll admit defeat - I've completely forgotten the poem "'Twas the night before Christmas" and all I can remember is PRANCER, DANCER, DONNA and BLITZEN and of course RUDOLPH. There is a free issue to anyone who can come up with the full list for me.

Well I had better stop waffling on as I've still got quite a bit of the Newsletter to do and I want it to arrive before Christmas if at all possible. I'm trying to catch the last posting date for overseas post but they don't give us much time. I also want to put out a plea for contributions for the newsletters. I haven't had much at all apart from those from the regular contributors and the February/March issue could do with a bit of padding out so if you have anything that you would like to send in for that and future issues then please feel free to do so. As an added incentive (no pun intended) there is a free issue for the best article sent in for each issue.

Right, all that remains is for me to send my warmest wishes to you all both home and abroad for the festive season. I sincerely hope that you all have a very Merry Christmas and a prosperous, happy and peaceful New Year! See you all again next issue.

Mandy

LETTERS

Dear Mandy

I would like to reply to the letter from Nigel Alefounder in Newsletter 14 about the Freescape colour palette grabbed as a picture in order to obtain the same colours in the border as in the Freescape system. In 3D Kit 1 this is the only way to obtain exactly the same first sixteen colours of the Freescape palette. As only the first sixteen colours are necessary to have the same border colours. I would advise to try and load the grabbed palette in a different colour mode into your paint package, for instance: same screen size - VGA - 16 colours. In this way you will not have the annoying black on black menus and you can save your screen as a picture and afterwards load it in again in 256 colour mode to be able to use more colours. In 3D Kit 1 this does not affect you changing the other colours in the Freescape colour palette. You can do that freely as long as you do not change the first sixteen colours because that also affects your border. At this moment it occurs to me that when you do change the first sixteen colours of the Freescape palette you can also manage to colour your border in a way that you would like. Only to obtain the same colours as in your paint program will be difficult because the palettes differ a lot, and not only that but the red, green and blue value numbers are not even the same. You have to have a paint program such as Deluxe Paint II Enhanced to even be able to obtain the red, green and blue colour value numbers of the grabbed picture and these numbers differ a lot from the Freescape palette numbers. In the previous PC version of Deluxe Paint these value numbers were not available.

As far as 3D Kit 2 PC is concerned: As from version V2.07 the Freescape palette is automatically adjusted to the colours of your border. You can try it out by adding a border of the provided ones, set the view window and then try to colour the floor. You will see in the colour palette that the first five or six colours will differ from the original palette. You do not have a choice anymore. Whether you choose colours from Freescape or from Border, the palette is adjusted to the colours of the Border. It is also not possible anymore to change the Freescape colour palette because when you add your border to the defaults the first time you press ESC in the test window to let the border appear the colours are adapted to the present border. I believe that this is the best solution because you can paint your border in all the colours you like and then use the same ones in the Freescape system. When you have created and saved a datafile in this way and when you load it in the next day, at first the colours will have the original Freescape palette, but when you press ESC in the test window your border appears and your colours are adapted and will be exactly as you used them the day before. I hope you understand what I am trying to say because I find it extremely difficult to explain it properly on paper.

Mieke Van Der Poll - Kit 1 and Kit 2 PC and AMIGA
De Lint 148, 4761 XS Zevenbergen, Holland

Thanks for the information Mieke. By the way, I know that the other members will want to join me in sending you sincere congratulations on your recent 25th wedding anniversary! Have lots of fun during your celebratory weekend.....Mandy

Dear Mandy

Can you send another subscription form as a friend want to join the User Group. Do you know anything about batch files? I am trying to write a security program but can't make it so I can enter a passcode. I've written it so you can use a passdisk instead but it is a lot of bother, especially if you can't find the disk! I seem to have a problem with the post. I sent Mark Rose a letter around March and am not sure if he received it. Please could you ask Mark to check if he did because I stupidly sent my only copy of a demo game to him. Finally, do you know where I can get hold of a new mouse for my Amstrad PC 1640 as mine has died?!

Colin Chow, 156 Linden Gdns, Enfield, Middx EN1 4EA

I am sure that other members will come to your aid, Colin, with help for the listings you need for your batch files. As for the mouse, well as they no longer produce a 1640 it might be a little difficult, I would suggest that you contact your local Dixons store or Tandy and ask them if they can help supply one. Dixons I know now have a separate parts department that deals with enquiries like yours. It might be a good idea to ring Amstrad to see if they still have a stock of that mouse or they might be able to suggest an alternative for you. If all that fails then your best bet would be to try and purchase a second hand one. There may be a member out there who has a spare that they might like to sell you, if their machine died and they still have one. If any other member has a suggestion about this then please write to Colin - I have printed his address in full..Mandy

Dear Mandy

I have been using the 3D Construction Kit 2 since it was released and have been very impressed with the advances made from Kit 1. I am currently using version V2.03 of the Kit but I have found a minor problem during the 3DMAKE process to create a stand-alone world. I have created a world and included a border as it says in the manual and it works find during the TEST facility in the Kit but after running 3DMAKE and compiling this world to a floppy disk the border refuses to appear in the completed stand-alone world. The curious part of my tale is that if I compile the aforementioned world and border to my hard-drive the border DOES appear. But... if I then copy this fully working copy to a floppy disk the border, once again, fails to appear. Also, if the world has been compiled to a floppy disk and I then copy this to my hard-drive the border will appear when run from the latter but not the former. Confusing, isn't it? I have checked my floppy disk for any bad sectors/blocks, viruses etc. and have found absolutely no problem with it. Can you please help me?

Steve Frampton - AMIGA

In earlier version there were quite a few problems. With version V2.07 and onwards the problem has been rectified. What is happening is that the hard disk is storing the directory of the borders in the datafile and when you transfer this to floppy and try and load it, it tries to access the hard disk to find the border. When you use MAKE directly to a floppy this shouldn't happen. The best thing you can do is to send me your disks for exchange to version V2.07 - or V2.09 as I will receive this very shortly and, hopefully you should have no further trouble.....Mandy

Dear Mandy

I have a request for help and I hope you will publish this in any form you feel editorially appropriate in the hope that if you do not have a complete solution yourself another reader may be able to help. Whilst I appreciate the advances made in version two, I am afraid I have spent all my spare time, without success, trying to find a solution to the problem of not being able to clear text from an instrument in the same way as we were able to in version one. Although nobody seems to have mentioned it, the original KITGAME, when recompiled with version two displays at least three areas of incompatibility. The text problems I mentioned previously, (which I understand from the programmers), is associated with the new colour arrangement but to which I was not given a workable solution, the timer not working as previously and the boxes/puzzle room door routine, i.e. the fact that the boxes are no longer destroyed so if you move out of sensor range they reappear and when shot the door does not appear.

John Latty - AMIGA

The reason we cannot clear the text from an instrument in Kit 2 as we could with Kit 1 is that the background colour for the text in the Kitgame was colour zero which in Kit 2 is invisible. This was done intentionally for Kit 2 to allow greater flexibility when using text. To be able to clear the text in Kit 2 in the same way as we did with Kit 1 we should select a different background colour for the text - anything except colour zero. Drawing a box with the Freespace Command Language will also allow you to clear your text successfully. As you will see from the information in the DATA AND OBJECT COMPATIBILITY item, this issue there is, indeed a problem with transferring datafiles from Kit 1 to Kit 2 when routines are complicated and use Sensors. I don't yet know how to overcome this but I am working on it and will report back. At the moment it seems that "Sensor routines" will have to be re-written to overcome the problem once the datafile is transferred to Kit 2. Perhaps other members have already found a solution to this problem and, if so, will write in and let us know what their solution is.....Mandy

Dear Mandy

I am new to the 3D Kit and I would like help please. I would like to know how to place text in your games, time and energy bars, the end time of a game. Sound also seems to be a problem. I have an Amiga 600 with two drives and 2mb of memory. I am using Kit 2 and any advice would be appreciated. I have enclosed a S.A.E. for the clubgame information. One problem I have while I am making a game is that I place an object, say a fireplace and when it touches the ground it disappears and is nowhere to be found. Also when I lay down a roof it suddenly shrinks to a thin bar. Have any other members had this problem? Can anyone please explain to me how to load a picture (title) from deluxe paint 3 into a game. I use workbench 2.0.

Alastair Miller - AMIGA

Now that you have all the past routines of the Clubgame you will see that most of your queries have been covered as the routines show how to put text in your games. You are also just in time for answers to how to program time and energy bars and how to include a border in your game as for the next few issues Mieke Van Der Poll is taking over the clubgame articles to show us how to finish off the game with a

border, time and energy bars and all sorts of other goodies. If you still need information on loading screens etc. after that then please let me know as all the information you need was covered in various back issues of the newsletter.....Mandy

Dear Mandy

Many thanks for the 3D Construction Kit 2 program that you sent me. Having a copy at last that works is great. The program is excellent with plenty of scope for experimenting. I find that the 3D principles at first require completely different thinking but I am getting used to it. I enclose my registration card plus membership of the User Group. Do you think it would help me to get to grips with the program by reading any back issues of the newsletter (routines, tips etc.)? Also which refinements are the programmers making to version V2.09? Good luck with the User Group, I hope it is going well.

Steve Harding

At the risk of sounding as if I want to make "loads a money" out of you, Steve, I would say that all the back issues would be extremely useful for a new member as they contain a great wealth of routines, tips, information etc. that you would find invaluable. One of the most useful things you can do is to send for the User Group Game routines which will help you to program a game from start to finish and should really get you into the swing of things by showing all the basic things you need to know. The programmers are not changing the program with the next version that they are working on. They are trying to iron out a few problems that still exist in the present version. I have heard that some more goodies might be coming our way in the future but it is top secret at the moment so I cannot say anything yet! Keep watching this space!.....Mandy

Dear Mandy

Thanks for the two back issues you sent me. This means that I have every issue of the Newsletter now so far. Having received another of your little notes, I wondered lonely as a cloud! Ooops! sorry, wrong script - I wondered if you had any A4 size 3D Kit letterheads in your possession. I then thought that if you haven't I would design and send you one. Hope that you like it. All you have to do is sign it and photocopy it and it will come in handy if you need to send a longer note or scribble a drawing for someone. I haven't sent it as a replacement for your great little notes merely as a compliment for larger letter etc. I have also sent you some screen shots of my latest disk called ULTIMATE DETAIL. This disk - not finished yet - shows just what kind of potential the Kit has for making detailed objects and will put to shame anyone who thinks you only have a LEGO building block type of program. I know that a printer doesn't do justice to the screen shots but you can see what I mean.

Tony Hartley - ATARI ST

Many thanks for the letterhead - it is much appreciated. The screen shots are fantastic. I just wish that I could print some of them here in the newsletter so everyone could share them but photocopying just ruins the effect and all the different colours get blurred into each other. If anyone wonders just what can be done, in detail, with the Kit then you should take a look at any of the disks Tony has done. You would be absolutely amazed.....Mandy

DATA & OBJECT COMPATIBILITY

Nigel Alefounder, Mieke Van Der Poll and Tony Hartley have been investigating the compatibility of datafiles, borders, objects etc between different computers to see what can be achieved. Here is the latest information they have sent me. I am quite excited because it looks really promising indeed and soon we may be able to have the games in the PD library across ALL formats. Read on:

Mieke Van Der Poll writes: "Thanks again for sending me the disks BUILDINGS (Amiga) and FAST TOWN (Atari ST). I managed to load FAST TOWN easily into the PC and I had the same experience with the colours and the maze as Nigel Alefounder. I transferred BUILDINGS from the Amiga to the PC successfully. I use a program on the Amiga called CROSS-DOS with which you can transfer PC files to the Amiga and Amiga files to the PC. So naturally, when I copied, FAST TOWN (Atari ST) to a PC format disk I tried to transfer it to the Amiga and it worked! The datafile loads easily into 3D Kit 1 on the Amiga. All the original colours are there and the six NEO borders can be used at once. This came as a surprise to me because although I am able to transfer 3D Kit 1 PC files, they simply will not load into 3D Kit 1 on the Amiga. It probably has something to do with the colour palette and the way the information is saved on the Atari and the Amiga which differs from the PC. Although not immediately, 3D Kit 2 does recognise objects from 3D Kit 1, only it takes a lot of time before you have the right data format. You first have to load them one by one into 3D Kit 1, then save then one by one as a datafile with the extension .3WD. On the PC the datafiles are saved with the extension .KIT automatically, so you even have to rename them with .3WD, deleting the .NAM and .PAL files.

Then in 3D Kit 2 you have to go through the same procedure: Load in each datafile and save it as an object again, afterwards deleting all the datafiles. I did so with all the objects of FAST TOWN for the Amiga, but for the PC I would advise members to order the Atari Disks themselves and follow the advice of Nigel Alefounder in his letter in Newsletter 13. I enclose herewith two disks for the Amiga PD library, one for 3D Kit 1 and one for 3D Kit 2 of FAST TOWN, so now it is available for three 16 bit versions."

Tony Hartley writes: "Here are the final results of the PC to Atari ST to PC 3D data transferal using Kit 1 and Kit 2. The good news is that Kit 1 data transfers between the two computers ok, providing there are no fancy routines involves such as using sensors. Kit 1 PC data will also work on the Atari ST Kit 1 and Kit 2 providing the relevant file extensions are changed to suit. Animations and conditions also work from PC Kit 1 to Atari ST. The bad news is that Kit 2 data will not transfer either way. Colours alter between the computers during the transfer stage and objects and areas will not transfer. Other news is that Borders can be exchanged using screen grabbers or conversion software programs. Make sure that folders, directories are not used to place data in. Don't for goodness sake use a virus checker or any other boot up program on a disk when using for Atari ST to PC transfer.

It was very kind of Nigel to keep swapping disks with me. The disks must have travelled back and forth countless times but it was worth all the effort and here are the results."

ANYONE ELSE GOT ANY THOUGHTS OR IDEAS TO ADD TO THIS?

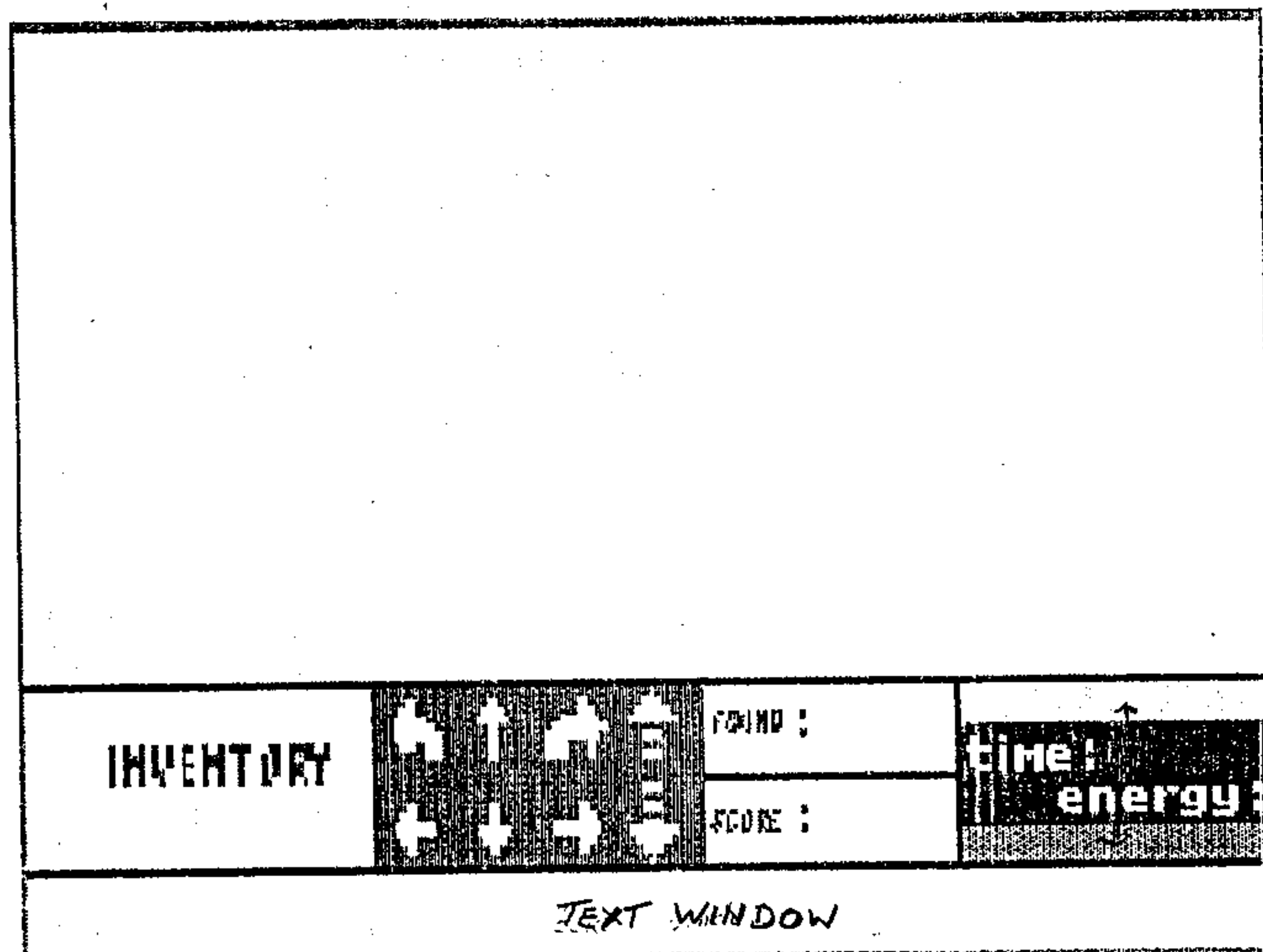
THE USER GROUP GAME

This issue - by *Mieke Van Der Poll*

PART EIGHT:

We are now going to add a border to our game, add time and energy bars, inventory routines and all sorts of goodies before we make it into a stand alone game.

Firstly we should design a simple border with your favourite paint program. Something like this will do:



As you can see, only the instruments necessary for a simple game are designed, but this border will give us plenty of possibilities to create our instruments to use and add the necessary variables to it. After that we can also make the relevant General Conditions.

We will not discuss the colours of the Freescape and Paint program packages in the different 3D Kit versions here because in this article the most important thing is to see the effects of our programming.

First we are going to choose some variables. Remembering that we have already used variable 50 and variable 60, we will pick our new variables from number 30. The variables will be as follows:

For the TIME BAR V30
For the ENERGY BAR V31
For the FOUND BAR V32
For the SCORE BAR V33

You probably notices the Inventory section in the Border. The meaning of this is that when we press a mouse button on this part of the Border, we should be able to see a message appear in the TEXT WINDOW - "Inventory follows" : "You are carrying:" (either nothing or one or more objects). In order to achieve this we need two system variables which are used in connection with the X and Y coordinates on screen when the mouse button was last pressed. Furthermore we need three variables to make the necessary GENERAL CONDITIONS to create the correct message in the text window. Inventory follows: You carry nothing, or you carry one, or you carry more objects.

The two system variables are V17 and V18
For inventory screen/text: V34, V35 and V36

Of course we need to have some objects to pick up so that we really have a message to give on screen. So far we only have a few objects within the game - you can add more later on to make it more interesting. We will give each of our objects a variable too:

THE KEY - V37
THE TORCH - V38
THE CRYSTAL - V39

At the beginning of the game we can set all those variables to zero in the first General Condition or, if using Kit 2, the Initial Condition, just as we did in the last issue for our Loading and Death variables. When we reset the environment this means that every variable will indeed be set to zero again.

Now we have to create the relevant Instruments for the Bars in our border. I will do a step-by-step guide for Kit 1 users but for Kit 2 users this is almost exactly the same. Where necessary I will give the alternative for Kit 2.

Load the 3D Kit program (3D Editor) and under the FILE MENU - LOAD BORDER (Kit 2: LOCATE and ADD BORDER). Under the GENERAL MENU - SET VIEW WINDOW and then click on CREATE INSTRUMENT. Before editing Instrument 1 it might be useful to look at the colour palette and choose some colours as foreground and background colours for the different instruments. I will give you some colour numbers but if you want other colours feel free to choose.

Click on EDIT INSTRUMENT, click twice on INSTRUMENT 1 and an edit window will appear. Click on TYPE until it reads HORIZONTAL then click on the SET BOX. You will see your border now. (in Kit 2 you will have to call your border by clicking on the coordinates square). Click on the top left of the timer bar with the left mouse button and while holding it down drag a square around the bar. Let go of the left mouse button and move the square a bit until you think it has the right size. Then click on the left mouse button again.

Back in the instrument edit window again you will see that the correct variable number is already there, so we do not have to change it. The figure 1000 in the Right/Top means that you can add 1000 points to the variable 30 before you run out of time. This being a suitable number at the moment we will leave it that way. We have to choose a foreground and background colour now. Click on the FG COLOUR box, fill in the number 065, press ENTER/RETURN. Click in the BG COLOUR box, fill in the number 073 and press ENTER/RETURN. Click in the View Box to see if everything is to your liking and if so, click on OK in the Edit Window and Instrument 1 is ready.

In this way we are going to create five instruments in total. If you want them to see in the way they are going to be in a stand alone game then you can make the first General Condition (or Kit 2 - Initial Condition) like this:

```
UPDATEI (1)
UPDATEI (2)
UPDATEI (3)
UPDATEI (4)
UPDATEI (5)
```

When you have all five instruments ready and go into TEST mode you will see your instruments updated (but not ready to work yet). In Kit 2 you have to fill the border number (1) into the defaults and press ESC in TEST mode to see them.

Create Instrument: Edit Instrument 2. This also is a horizontal instrument. Set it as described above. Fill in variable number 31 and choose FG and BG colours 129 and 138 respectively. If everything is alright then click on OK.

Create Instrument: Edit Instrument 3. This is a numerical instrument - so click in type-box until Numerical appears there. This is connected to the Found bar so set it to the word FOUND and try to make it the right size for two zeros to fit in. You can always check this if you have made General Condition 1 as above. Change the variable number into number 32. Change the number in the Right/Top into 10 as we have only three objects at this stage. Type in the FG and BG colours as 240 and 101. Press ENTER/RETURN and click on OK.

Create Instrument: Edit Instrument 4. This one is also numerical. Set it in the same way as instrument 3 only try to make it the size to contain four zeros. Change the variable into number 33, leave the number 1000 in the Right/Top box and choose FG and BG colours 240 and 101 again.

Create Instrument: Edit Instrument 5. Click on Type box until TEXT WINDOW appears. Fill in the number 000 in the variable box because we do not need a variable for this one. Leave the number 1000 in the Right/Top box and choose 240 and 101 as the FG and BG colours again. Set the instrument in the lowest bar of the border and use the full width of the bar. Click on View to see if it is correct, then click on OK.

Next issue we will continue with the Inventory Screen and the different General Conditions.....

HINTS AND TIPS

LESS DISK SWAPPING

By *Mieke Van Der Poll* - AMIGA KIT 2

When you have only one drive - this also helps with two drives - then you will have to swap disks now and again. If you prepare a blank formatted disk, create all the directories you need and copy the relevant files on to them, then with two drives you don't have to swap disks at all and with only one drive you only have to swap 1 disk. So create the following directories:

- AREAS
- DATA
- BORDERS
- OBJECTS
- SOUNDBANKS
- TEXT and the text directory can be sub-divided:
 - ANIMS
 - BRUSHANIMCOND
 - INITIALCOND
 - GENERALCOND
 - LOCALCOND
 - OBJECTCOND
 - PROCEDURES

If you use a border from the provided ones, copy it into the borders directory. If you have made a sound module, copy it into the soundbanks directory. If you want to save an object you created, save it into the objects directory, etc.

The reason I write all this is that I experienced problems when I didn't have the correct disk in the drive and I kept getting messages like "Please replace volume Sounds in df1:". Then when I replaced the disk, the 3D Edit program had vanished. I could drag the Workbench screen down and then the 3D Edit screen reappeared, but when I needed to swap disks in order to load a border, the same message appeared and I lost the screen again.

When I made a disk as described above I found that all my disk swapping worries were finally over.

TIME-SAVING

By *Tony Hartley* - ATARI ST KIT 1 AND KIT 2

If you have made a town with lots of doors leading into lots of different rooms, instead of making an area for each room, you could save time by splitting an area into four rooms using dividing walls. Then it makes it easier to copy objects, doors, furniture etc from one room to another.

The four rooms could then be accessed from different areas and do not necessarily have to lead into each other. I have used this very successfully in my game and it saved loads of time and effort.

NEWS!

News just in from the programmers at Incentive is that work on the final version of Kit 2 is progressing well and that version V2.09 (or whatever version it will be) will definitely be ready by the end of this month. I am told I can expect the disks by mid-December for final checking. So, all being well, I hope to be able to duplicate them and post them out just after Christmas, depending on there being no dramatic discoveries by Mieke or Tony in their final checks. The Amiga and PC versions are almost completed and the Atari ST version, which is giving a few extra problems, should follow shortly after.

Mr Ian Andrew, the programmers and myself would like all the playtesters to know how much their efforts and hard work are appreciated. Also thanks to everyone who wrote in to help point out where the problems were so that all the niggly bits could be sorted out. All the comments and suggestions were much appreciated. Thanks a lot folks - you have been great! Thanks also to everyone for being so patient. No program is entirely perfect and one as complicated as Kit 2 can be especially difficult to get just right as there is so much in it.

GRAND CHRISTMAS COMPETITION

The festive season is here again, bells ringing, joy and goodwill to all men (and women) and to celebrate we thought it was time to run a competition to celebrate! I say "we" because the idea was from Tony Hartley who suggested that it would be a good idea - not only that but he kindly set to work to produce the competition puzzle in time for this issue.

It couldn't be easier to enter - all you have to do is to complete the wordsearch on the opposite page and you will discover that one of the words is missing from the grid. Just write in and tell me what the missing word is. All correct entries will be put "in the hat" and a winning name will be drawn out.

The winner will have the option to select from the following prizes:

NEW 3D FLIGHT SIMULATOR CREATION PACKAGE (PC)
 3D KIT 2 PACKAGE (AMIGA)
 3D KIT 2 PACKAGE (ATARI ST)
 3D KIT 2 PACKAGE (PC)
 (Kindly donated by Domark Ltd)
 A YEARS FREE SUBSCRIPTION TO THE USER GROUP
 UP TO 12 BACK ISSUES OF THE USER GROUP NEWSLETTERS
 UP TO 10 SELECTIONS FROM THE PD LIBRARY

Please send your entries to Mandy at the usual address and please state what prize you would like should you be the winner. Closing date for entries is 1st February 1994.

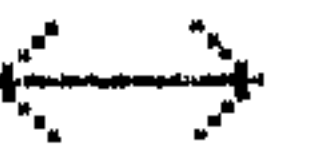
Right all you have to do now is get into the competition spirit and away you go! If there is sufficient interest in this competition - the response to the last one was a bit apathetic - then maybe we will have a regular competition. It might give Tony a chance to enter and win something - poor soul he is banned from entering this as it was his creation. So folks it's over to you.....

THE 3D CHRISTMAS COMPETITION

THE WORDS IN THE LIST ARE ALL EXCEPT ONE TO BE FOUND IN THE GRID. CIRCLE THEM IN THE GRID THEN TICK THE ONE MISSING AND SEND IN THE FINISHED ANSWER TO MANDY AT THE USUAL ADDRESS.

AREA	CUBE	
ART	DATA	PYRAMID
ATTRIBUTES	DISK	REALITY
BORDER	FREESCAPE	SOUND
CLIP	KIT	SPHERE
CONDITION	LINE	VIRTUAL
CONSTRUCTION	OBLONG	WINDOW

C	L	I	P	K	A	R	E	C	S	O	N
P	O	K	V	I	R	T	U	A	L	O	O
E	D	E	W	T	E	P	T	T	I	H	I
H	O	I	R	E	A	L	I	T	Y	F	T
T	N	D	M	E	L	V	C	R	S	R	I
O	U	C	D	A	H	U	E	I	L	E	D
E	O	R	D	E	R	E	N	B	E	E	N
L	E	E	T	T	L	Y	O	U	U	S	O
O	D	R	E	T	I	P	F	T	U	C	C
N	A	N	E	N	F	F	E	D	A	L	
G	O	T	E	R	E	H	F	S	F	F	E
C	E	W	O	D	N	I	W	O	T	E	E



FORWARD

THE WORD NOT IN THE GRID IS _____

PUBLIC DOMAIN LIBRARY
LATEST ADDITIONS TO THE LIST

WAR OF THE WORLDS

For Atari ST 1meg - Written with 3D Kit 2

DATAFILE FORMAT - BUT PLAYS LIKE A STAND-ALONE

Having seen and enthused over Tony Hartley's other PD offerings - Fast Town and Fast City, I was quite excited at the prospect of taking a look at Tony's first full game. I certainly was not disappointed! Anyone who remembers the classic film WAR OF THE WORLDS will find themselves transported instantly into that very same situation. The Martian ships are there complete with authentic sound effects and you can be forgiven for thinking that you are taking part in that film!

Martians have invaded the earth and you are the only person who can stop them. It isn't easy either! You have to find five laser parts to enable you to shoot the transmitter which is set up on Mars and is controlling the whole caboodle, hijack a martian spaceship and learn how to fly it to Mars. If that wasn't tough enough you have to locate the transmitter on Mars and destroy it. Following that adventure you have to get back to earth to a hero's welcome.

Tony has included full instructions on the disk and you must read them fully so you know exactly what to do. There are some great loading screens to keep you interested until the game proper loads. Then the fun begins! You have five lives and, believe me, you need them all. There are blasted alien ships all over the place and they shoot you on sight. Luckily Tony has provided an Alien Detector within the border so you know when they are lurking around. Thankfully you are safe within a building when you start the game and there are safe havens scattered about the place for you to get yourself into for breathing space - providing you are quick enough.

This is a BIG game with tons of locations to explore - and that is just on earth as I haven't yet managed to get the spaceship to visit anywhere else. I keep running out of lives but I am getting much better at playing this with each session. This game has you coming back for more and more and more.....

The sound effects are mind-blowing. There are the authentic sounds from the film of the aliens shooting you, your own laser makes a terrific blast of sound when you shoot anything. There are sirens going off when you don't keep to the pathways and the program even SPEAKS to you! I nearly fell off my chair when a voice thundered "Warning!" at me when I tried to do something dangerous.

Most of the features of Kit 2 can be found here. The water in the canal looks real, objects fade and appear smoothly. Vehicles and buildings look extremely realistic, animations abound. This game has everything.

There is a really tense atmosphere during play. Not least because of the Martian ships popping up when you least expect them. I HATE those Martians, I really do. After your first playing session you find yourself really determined to defeat those blasted creatures and their ships. Whew! I'm really getting carried away here! I am not kidding - this game is really good. The best thing that I can suggest is that you get hold of this and see for yourself exactly what I mean. You definitely won't be disappointed. This little gem will keep you occupied for weeks!

FAST CITY RAIL AND SEA
FOR ATARI ST - WRITTEN WITH KIT 2
DATAFILE FORMAT

Tony Hartley also included this disk for review although it isn't available from the PD Library but direct from Tony Himself. The reason for that is that he wants to personalise each disk for everyone who buys it. Anyone who has seen Fast Town or Fast City will know that it is packed full of all sorts of objects - this time to enable you to build your own rail and sea network. There are ready made Areas, Boats, Buildings, Cars, features, Railway Stations and, of course, trains. I personally think the trains are great. If you ever wondered exactly what level of detail could be achieved with 3D Kit then this disk will show you!

Available from Tony Hartley at £2.50. The address is 19 Kipling Close, Lockwood, Huddersfield, Yorks, HD4 5HA.

RANDOM BOXES - CITY SKYLINE
FOR ATARI ST - PAINT UTILITY
NOT PD BUT COMPLETELY FREE!

Written by Ronald Connell, this is a program which generates buildings for a large city skyline overlaid on a painted background. It saves your paintings as a PII file and you can load your own paintings into the program and have buildings painted over that too if you wish. The program is menu driven and there are full instructions on how to use it on the disk. I found it quite fascinating to watch the way that the buildings were generated - the whole effect was very effective. You can stop the generation at any time when you are satisfied with the skyline created - not to do so and to let it run on rather spoils the overall effect. There are plenty of ready-made skylines on the disk too so if you are feeling lazy you can view them to see just what can be achieved.

Ronald doesn't want to charge for this program and would have distributed it himself if only his computer hadn't decided to die on him so I am going to distribute it for him. All you need to do is to send me a blank disk and the return postage and I will send this to you with pleasure.

FAST TOWN
FOR THE AMIGA - KIT 1
ALSO AVAILABLE FOR AMIGA - KIT 2
DATAFILE FORMAT

Written by Tony Hartley and converted to the Amiga by Mieke Van Der Poll. At last, now all Amiga owners can see what Atari ST members and myself were raving about, when this program first appeared. This program allows you to create your own Town as it is packed full of buildings, vehicles, roads, lamps, signs, benches, trees - goodness, the list is endless. All you have to do is to load each selected object in and place it where you want and in no time at all you have designed your own town. There is even a ready made town for you to load in and explore at your leisure.

All PD disks cost just £1.50 each (or £2.50 for overseas members). Available from the usual User Group address. PC public domain disks are available from Mark Rose - see the contents page for the address. For a full list of PD titles available - with full descriptions, send a stamped addressed envelope - A5 size (same size as the newsletter).

8 BIT ROUTINES

CALLMC INFORMATION FOR C64 USERS

By *Steven Flanagan* - COMMODORE 64

First of all I would like to thank John Elliott for pointing out that the command CALLMC only works once a game has been compiled. I had previously given up with the command because it doesn't work in the condition editor.

The following information is for C64 owners who know 6510 machine language and own a machine code monitor cartridge such as the Action Replay.

The start of variables address for the Kit is at \$4404 (17412 decimal). For example, variable 0 is contained at address \$4404, variable 1 at \$4405, variable 2 at \$4406 etc. You can write your own machine code routines that manipulate variables in ways that are not possible using the FCL.

There is a large chunk of memory available that is not used by a compiled game. It is the memory where the eight editor sprites were stored in the editors. The available memory is from \$C400 to \$C5BF and also \$C640 to \$C67F. A total of 512 bytes, plenty of room to write your own machine routines.

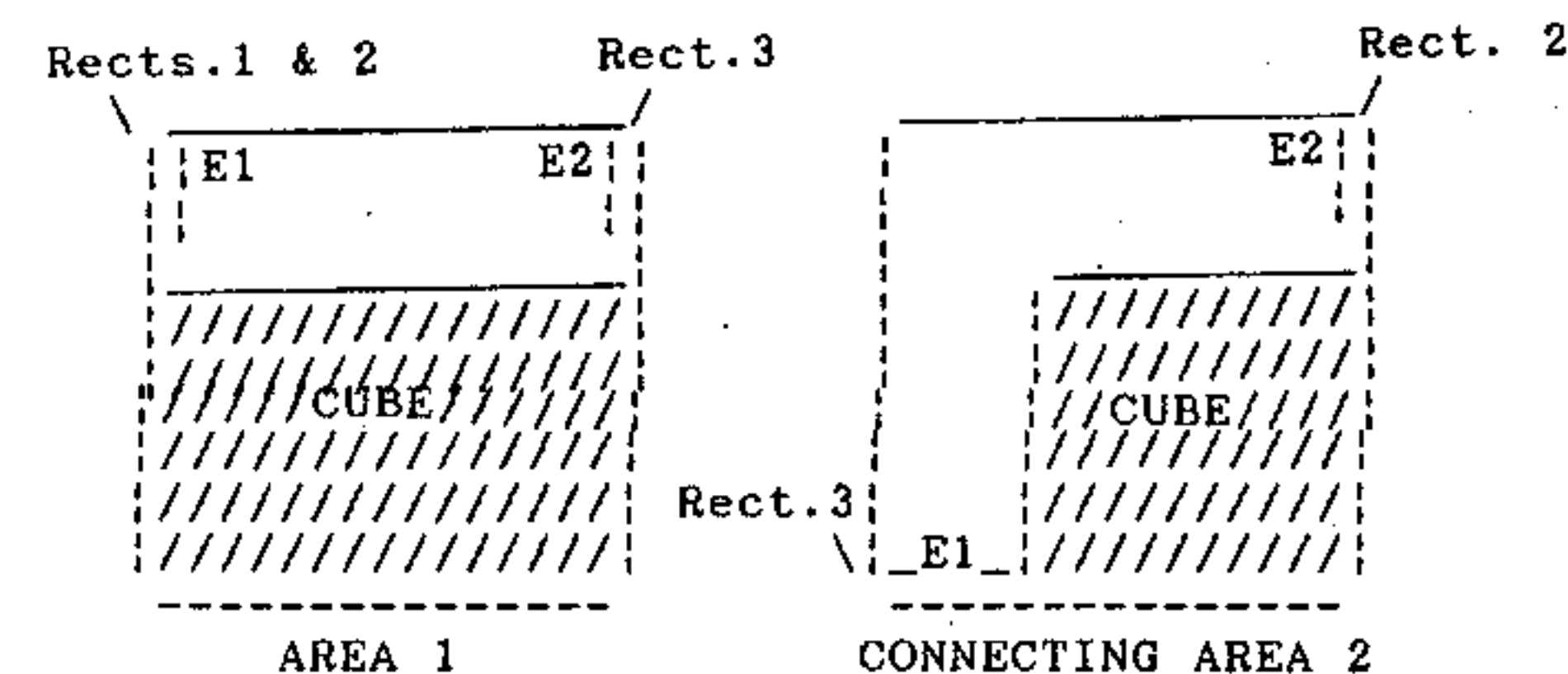
This memory is also in the VIC-11 video bank so you can use the memory to hold sprites. The possible sprite blocks are \$C400 to \$C43F, \$C440 to \$C47F, \$C480 to \$C4BF, \$C4C0 to \$C4FF, \$C500 to \$C53F, \$C540 to \$C57F, \$C580 to \$C5BF and \$C640 to \$C67F.

You can use the sprites rather like the brushes in Kit 2. For example, if your game had seven objects to be collected, you can use a sprite editor to draw these objects as sprites and place them in the compiled game from \$C400 onwards. You can then write a machine code program at \$C640 to check the game variables to see if the player has collected any objects and if she/he has, it turns the relevant sprite on. So when the player picks up say, a torch, a picture of a torch sprite appears, like an inventory. There is no limit to what can be done.

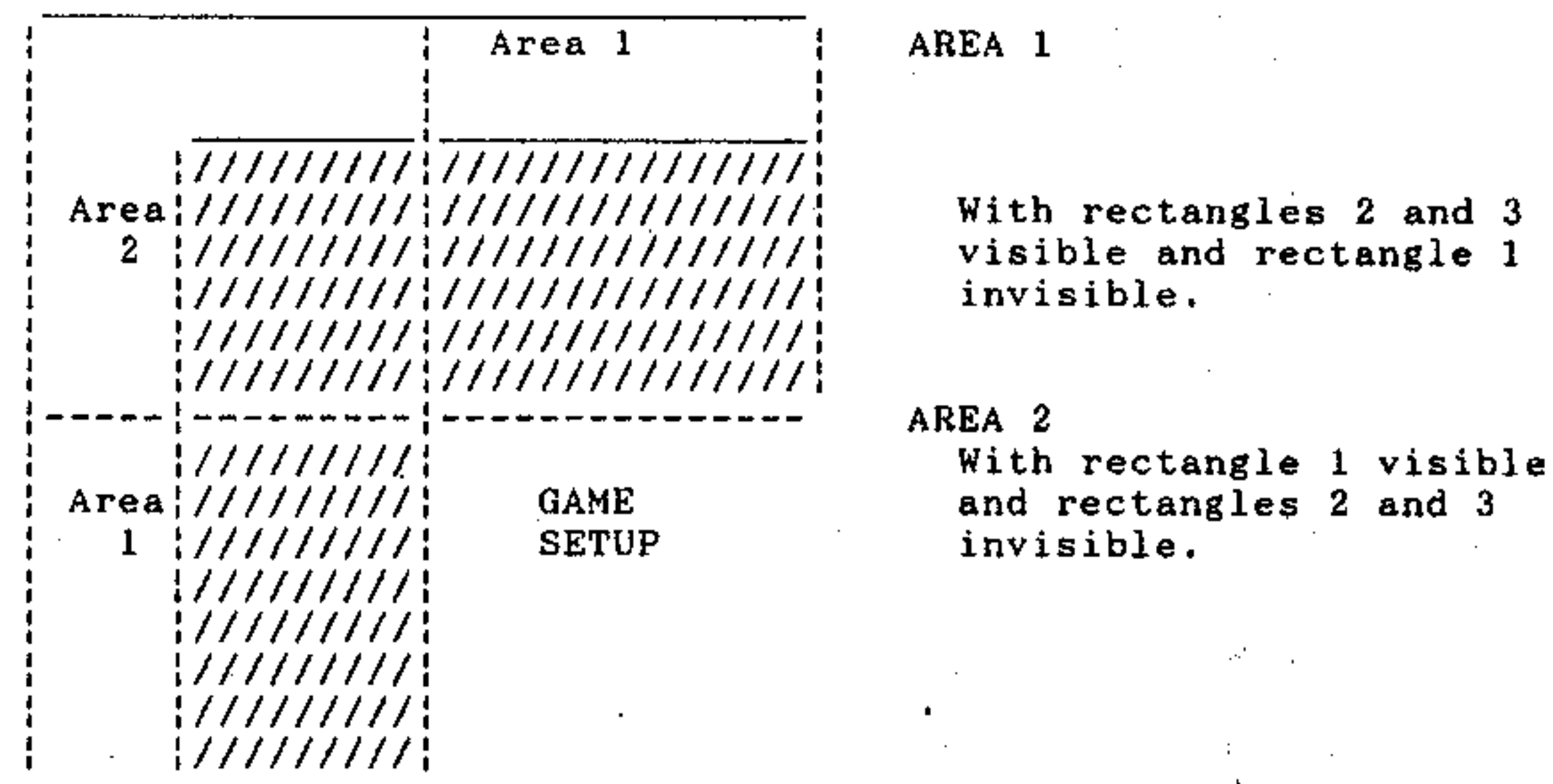
SAVING MEMORY

By *David Lacey* - COMMODORE 64

If you have two areas which are very similar with only a few objects different, you can just use one area and a few TOGVIS commands. As an example I will outline an area. I did this in one of my games and it works well. To all intents and purposes the player will think that he is using different areas each time when in actual fact he is moving back and forth along the same area. If there are no objects within the area there is no problem at all but with careful use of the togvis commands you will find that object problems can be easily sorted out.



(Note: Obviously you can't have a rectangle and entrance with the same number - sorry folks.)



came in here from above, lets say Area 4 entrance 1.

AREA 1: LOCAL CONDITION 1

```
IFHIT 3
THEN
SETV 1 1
GOTO 1 2
ENDIF
IFHIT 1
THEN
SETV 0 1
GOTO 2 2
ENDIF
IFHIT 2
THEN
SETV 0 1
GOTO 1 4
END
```


AREA 1: LOCAL CONDITION 2

```

CMPV      0      1 - in area 1
IFEQ
THEN
CALL      1
ELSE
CMPV      1      1 - in area 3
IFEQ
THEN
CALL      2
SETV      255    1
  
```

PROCEDURE 1

```

INVIS  1
VIS    3
VIS    2
  
```

PROCEDURE 2

```

VIS    1
INVIS  3
INVIS  2
  
```

AREA 2: LOCAL CONDITION 1-

```

IFHIT  2
THEN
SETV    1      1
GOTO    1      1
ENDIF
IFHIT  3
THEN
SETV    0      0
GOTO    2      1
END
  
```

This will work fine, but when you enter area 1 or area 3 the wrong objects will be visible for a second until they become invisible via the togvis commands that you should enter.

So local condition 2 in area 1 should really be a General Condition with the area number included after TOGVIS statements in the two procedures. This will make the objects change visibility while in the walkway - area 2. Of course this means this condition will be checked every move in every area. So it really is a compromise between speed and looks which needs to be decided upon.

Here is a small tip that might be helpful - especially for beginner's:

There is no command IFINVIS to do something on the basis of an object being invisible. This can be a real pain. However, this can be easily overcome by typing:

```

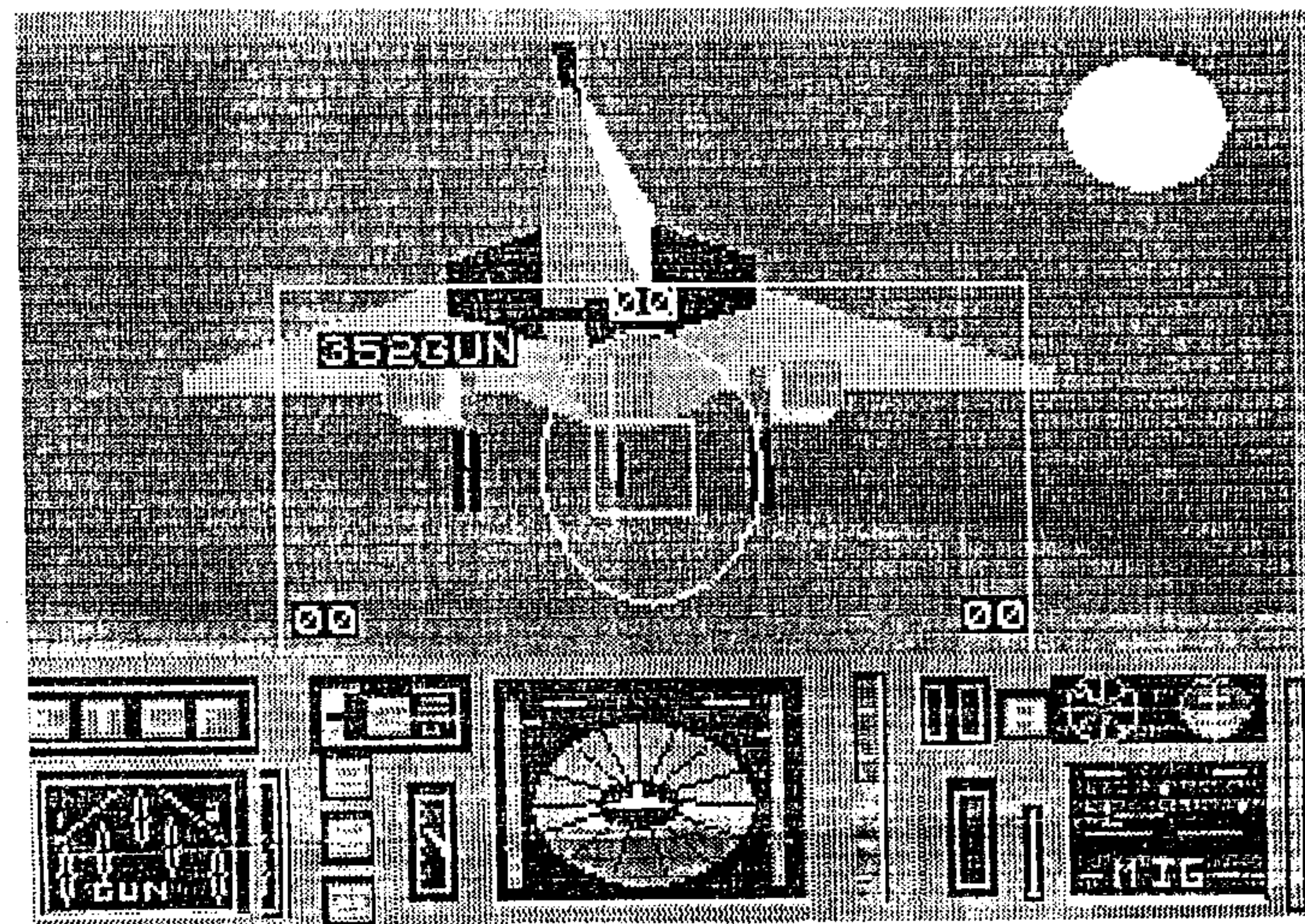
IFVIS (object number)
THEN
END
ELSE
.....commands
.....commands
ENDIF
  
```

16/32 BIT ROUTINES

AIRCRAFT HEAD UP DISPLAY ROUTINE

By *Tony Hartley* - KIT 2 ATARI ST
(For Kit 2 but could be adapted for Kit 1)

I have just been re-reading issue 14 of the Newsletter and I noticed that Mike Anders from the good ol' U.S.A. was asking how to get a Head Up display, (HUD for short), used on aircraft to give information onto the cockpit screen, on his 3D Viewscreen/Border. It seemed like a good challenge so here is the answer. All you have to do is to make four instruments, one circle and two frames for a great result like this:



First create a GENERAL CONDITION and EDIT CONDITION thus:

```

FRAME (70,60,249,199,4)
FRAME (149,89,169,109,4)
CIRCLE (159,99,30,4)
UPDATEI (1)
UPDATEI (2)
UPDATEI (3)
UPDATEI (4)
  
```

Next create 3 Numerical Instruments and 1 Text Instrument. Edit the

Instruments as follows:

INSTRUMENT 1

NUMBER 1 NAME ALTITUDE
XPOS 73 YPOS 128
XSIZE 16 YSIZE 16
VAR (set to whatever you want)
VAL 1 0
VAL 2 1000
TYPE NUMERICAL

INSTRUMENT 3

NUMBER 3 NAME HEADING
XPOS 150 YPOS 60
XSIZE 16 YSIZE 16
VAR (set to whatever you want)
VAL 1 0
VAL 2 1000
TYPE NUMERICAL

INSTRUMENT 2

NUMBER 2 NAME AIRSPEED
XPOS 233 YPOS 128
XSIZE 16 YSIZE 16
VAR (set to whatever you want)
VAL 1 0
VAL 2 1000
TYPE NUMERICAL

INSTRUMENT 4

NUMBER 4 NAME WEAPONS
XPOS 80 YPOS 70
XSIZE 143 YSIZE 13
VAR (set to whatever you want)
VAL 1 0
VAL 2 1000
COL 1 5 COL 2 7
TYPE TEXT WINDOW

Then set the View Window like so:

XPOS 1 WIDTH 318
YPOS 0 HEIGHT 136

Next design a suitable aircraft control panel Border to fill the bottom part of the screen that is not covered by the view window. Once it is drawn, use the LOCATE BORDER then ADD BORDER to get it into your 3D world. Then you should end up with a decent looking aircraft cockpit with head up display. One of the frames goes all the way to the bottom of the screen but you can alter it to any height position on screen that you wish.

Instrument four is used for displaying the type of weapon selected to fire with on screen and the other Instruments are for altitude, aircraft heading and air speed. This article is mainly to show how to make a very easy head up display. The programming of weapons etc. can be found on page 21 of Newsletter issue 10 (back issues available from Mandy), as explained by Thomas Stuffle. The other Instruments can be used with Variables to show height position etc. More frames and lines can be added on screen to get an even more technical looking head up display if you wish. If you don't know how to program the Instruments with Variables then you can leave the display as it is and it still looks great, otherwise for the technically minded, there is massive scope to get the HUD working properly. As I have just come up with this idea I will play around with it and see what I can add to it later. Happy programming.

COUNTDOWN SEQUENCE

By *Tony Hartley* - KIT 2 & KIT 1 ATARI ST

(This routine was written with Kit 2 but with only one small change in the routine itself and a bit of design to compensate, it can be used exactly the same for Kit 1. See * below for how to adapt for Kit 1.)

This is an OBJECT CONDITION routine that is used on a button on a control panel to start a countdown sequence working - as used in my game "War Of The Worlds". This could be used in a game where a player has started a rocket ignition/launch sequence. All the text is displayed to Text Instrument number one that is made up of two lines (one above the other), each line is fourteen spaces/characters long. Sound 7 is a suitable siren/warning sample and sample 8 is a rocket/engine sample. It is important to get the blank spaces exact in this listing so that the numbers in the countdown sequence move from right to left as they decrease in value.

Create an OBJECT CONDITION and EDIT OBJECT CONDITION as follows:

```
IF ACTIVATED? - If button pressed
SOUND (7) - Play sample 7
PRINT (" IGNITION \N STARTED ",1) - Print to Instr. 1
DELAY (150) - Gives chance to read
SOUND (7) - Play sample again
PRINT (" COUNTDOWN \N COMMENCES ",1)
DELAY (150)
SOUND (8)
PRINT (" 5 \N ",1)
DELAY (50)
PRINT (" 4 ",1) - The number 4 is on the 10th space
DELAY (50)
PRINT (" 3 ",1) - The number 3 is on the 8th space
DELAY (50)
PRINT (" 2 ",1) - The number 2 is on the 6th space
SOUND (8)
DELAY (50)
PRINT (" 1 ",1) - The number 1 is on the 4th space
DELAY (50)
PRINT (" ZERO ",1)
DELAY (70)
PRINT (" WE HAVE \N SEPARATION",1)
SOUND (8)
DELAY (100)
SEQUENCE (1) - Start Video Sequence of takeoff
ENDIF
```

* This routine is exactly the same for Kit 1 apart from the SEQUENCE command which plays a video sequence of the rocket/craft taking off. Kit 1 users can create a good effect by replacing the SEQUENCE command with a GOTO command and STARTANIM command to take the player to another area where you have already programmed an animation showing the craft taking off - rather like the end of the Kitgame.

STANDARD GAME OF DRAUGHTS

By *Ronald Connell* - KIT 2 & KIT 1 ATARI ST
(Written on Kit 2 but could be adapted for Kit 1.)

To make a game of Draughts or, as the Americans call it Checkers you should start off with a cube. Reduce the cube's height size in the Y axis until it looks like a flat square. Make a copy of this cube on the left side and colour this second cube (which is object 3), white on top. Create and Edit an object condition for object two and enter the following:


```

IF SHOT?
AND VAREQ? (10,V30)
THEN
MAKESOLID (10)
VIS (10)
ENDIF
IF VAREQ? (20,30)
THEN
MAKESOLID (11)
VIS (11)
ENDIF
IF VAREQ? (30,V30)
THEN
MAKEWIRE (11)
VIS (11)
ENDIF
IF VAREQ? (40,V30)
THEN
MAKEWIRE (10)
VIS (10)
ENDIF

```

After you have done this, create a Pyramid and reduce its size until it looks like a piece you can use for playing draughts. Place this Pyramid which is Object 4 on top of Object 2 square and enter this condition for Object 4:

```

IF SHOT?
AND SOLID? (4)
THEN
SETVAR (0,V30)
ADDVAR (10,V30)
INVIS (4)
ELSE
SETVAR (0,V30)
ADDVAR (40,V30)
INVIS (4)
ENDIF

```

Make a copy of Object 4, which would also automatically copy the conditions too, above Object 4. Shoot object 4 and bring Object 5 down and place it on top of Cube 2. Change the height of Object 5 to 4 or 5 units high to represent the "crownner". Create a group and place all the objects from 2 to 5 into Group 6. Go to the Object Menu and copy Group 6 three times, left, right, left until it is eight squares wide. This would have automatically copied the code in the objects you want with the source code in. Delete all the groups except Group 6 to make it one group, and place the rest of the objects in the area in Group 6. Make a copy of Group 6 above. When Group 7 appears spin it around until Group 7 is facing the opposite way to Group 6. Copy Group 6, Group 7, Group 6, Group 7 at the front only until you have a full draughts board of 8 squares long by 8 squares wide. The source code will have already been copied into all objects and the board to save time.

At this stage save your progress to disc and then carry on. The next stage is to change all the numbers in all the objects so that the numbers represent the object you want to disappear on that square. Change all the object numbers in the draughts board to represent the

objects you want to appear on each square. To do this you would have to identify all the pieces starting with small pieces first from the bottom of the board to the top and then the "crowners" from top to bottom. Make them all disappear and then identify all the black squares that have the source code in and draw a numbered map. Once you have done all this, to start us off and test it, you would need to initialize the board. This means we will make a command which will make all the pieces disappear leaving only the twentyfour pieces you want to appear at the start of a game. Twelve wireframe pieces on your side and twelve solid pieces on the opposite side.

Enter the following OBJECT CONDITION for the floor - Object 1:

IF SHOT?	EXAMPLE NUMBERS ONLY!
THEN	
MAKEWIRE (19)	Carry on until you have 12
MAKEWIRE (20)	wireframe pieces.
"	
"	
INVIS (5)	
INVIS (6)	Carry on until you have
INVIS (7)	the rest of the pieces all
"	invisible except 12 pieces.
"	

The condition is a long one and care should be taken.

WHILE PLAYING

When your small pieces reach the end, on the opposite side of the board, during play you want "crowners" to appear instantly. To do this you should set the command so that only the crowners will appear on those four ;end board squares - four wire frame pieces on your opposition side and four solid crowners on your own side. The crowners on your side will be used as a step up to start off crowners for the opposition. To do this you must set up four start off crowners. The solid crowners on your side will have the same value as the small solid pieces and would be summoned to appear when you move a small solid piece onto that square. Another four solid crowners should be placed on those four same squares which have the same value as the rest of the crowners on the board and will always appear when you move the crowners around the board and onto those squares. Do exactly the same thing for the wireframe crowners on the opposite side of the board for your own wire frame crowners.

So what you have is start up crowners, four on your side and four on the other side. Then you have the general crowners, four on your side and four on the other and then the rest of the general crowners. twentyfour of them on the rest of the board. In all there are seventytwo pieces used in the program and the majority are invisible. All seventytwo pieces are on the board before initialisation. With this game you can even edit the board by putting pieces anywhere to recall positions in a game you would like to repeat. After you have finished building a board you must delete all the groups before identifying all the objects so that they will work.

Ronald has sent a demonstration disk of his draughts program for the Public Domain Library. Full details are included with the rest of the latest editions received for the Library.....Mandy

CONTRIBUTIONS ARE NEEDED FOR THE NEXT ISSUE PLEASE